# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/825,426 | 04/03/2001 | Glenn Frank | 20062/3-CIP | 2062 |

7590        11/30/2005

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| EXAMINER |
|---|
| OYEBISI, OJO O |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3628 | |

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

<table>
<tr>
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<td colspan="2" align="center">Application No.</td>
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<td colspan="2">FRANK ET AL.</td>
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<td rowspan="2"><em>Office Action Summary</em></td>
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*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>29 August 2005</u>.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All  b)☐ Some *  c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## DETAILED ACTION

### *Specification*

1.    The disclosure is objected to because of the following informalities: In the detailed description of disclosed embodiments, the applicant mentioned and described investment location optimizer for two different accounts - taxable and tax-deferred accounts. However, in claims 1-12, the applicant recites the limitation maximizing asset allocation return in taxable and tax-free accounts. In other words, the applicant's disclosure in the detailed description of the embodiment does support the applicant's limitations in claims 1-12. Appropriate correction is required.

### *Claim Objections*

2.    Claims 8 –10 are objected to because of the following informalities:  claim 8 is referencing itself. Thus, its dependency is not clear. Further, the "tax deferred accounts" recited in lines 2 of claims 9 and 10 lack proper antecedent basis. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3.    The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

4.    Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Frank et

al (Frank hereinafter, U.S PAT: 6,240,399).

Re claim 1. Frank discloses a system, for running on a computer, for determining

an investment strategy for an entity with assets in taxable and tax-free accounts,

comprising: an account information input component, to accept information

regarding said assets in said taxable and tax-free accounts for said entity (i.e.,

tax exempt, see col.4, lines 57-67); an investment selection input component, to

accept information regarding a plurality of investments, including an indication of

a percentage amount of said assets to invest in each of said plurality of

investments; an account amount selection component, to determine an amount

to invest from said taxable accounts and tax-free accounts in each of said

plurality of investments, wherein said determined amounts substantially matches

said indication of a percentage amount to invest in each of said plurality of

investments; a time horizon input component, to accept an indication of a time

horizon; and a return on investment calculation component, to calculate a return

on investment for said entity based on said information regarding said assets,

said information regarding a plurality of investments, said indication of a

percentage amount, said selected amount to invest from said taxable and said

tax-free accounts, and said indication of a time horizon; wherein said account

amount selection component determines an amount from said taxable and tax-

free accounts in order to produce a maximal after-tax accumulation for said entity

at said time horizon.(see fig.1, fig.2, and the summary of the invention).

Re claim 2. Frank further discloses the system of wherein said account amount

selection component randomly selects amounts from said taxable and tax-free

accounts, and said return on investment calculation component calculates an

after-tax accumulation for said entity based on said randomly selected amounts

(see col.3, lines 37-57).

Re claim 3. Frank further discloses the system wherein steps of randomly

selecting amounts from said taxable and tax-free accounts, and calculating a

return, are performed a plurality of times, and said system outputs selected

amounts from said taxable and tax-free accounts which produce a maximal

return (see summary of the invention).

Re claim 4. Frank further discloses the system wherein said account amount

selection component selects an amount from said taxable and tax-free accounts

using Genetic Algorithms (GA) in order to produce a maximal return on

investment for said entity at said time horizon (see col.3, lines 47-60).

Re claim 5. Frank further discloses the system further including: a chromosome

structure, for use with said Genetic Algorithms, wherein said chromosome

structure includes a plurality of values, each value being an indication of an

amount from said tax-free accounts to invest in a selected one of said plurality of

investments; and said return on investment calculation component calculates an

after-tax accumulation for said entity based on said values in said chromosome

structure (see col.3, lines 47-50).

Re claim 6. Frank further discloses the system further including: a personal tax

component, to accept information regarding personal tax rates for said entity,

wherein said a return on investment calculation component calculates a return on

investment for said entity based on said information regarding said personal tax

rates (see fig.3, element 40).

Re claim 7. Franks further discloses On a computer system, a method of

determining an investment strategy for an entity with assets in taxable and tax-

free accounts, said method comprising: receiving information regarding a plurality

of investments; receiving information regarding a percentage amount of said

assets to invest in each of said plurality of investments; receiving information

regarding a time horizon; and for each of said plurality of investments,

determining an amount to invest from said taxable and tax-free accounts in said

investment, wherein said determined amount to invest substantially matches said

percentage amount to invest in said investment; wherein said determinations will

produce a substantially maximal after-tax accumulation for said entity at said time

horizon (see fig 1 and 2).

Re claim 8. Frank further discloses the method wherein said step of determining

an amount to invest from said taxable and tax-free accounts includes calculating

tax consequences over said time horizon for said entity based on said amounts

to invest (see summary of the invention)

Re claim 9. Frank further discloses the wherein said step of determining an

amount to invest from said taxable and tax deferred accounts further includes:

performing sampling steps a plurality of times, said sampling steps comprising:

randomly selecting amounts from said tax-free accounts to invest in each of said

plurality of investments; determining appropriate amounts from said taxable

accounts so that said selected percentage amounts for each of plurality of

investments is satisfied; and determining a result if said amounts were invested

as selected and determined for said time horizon (see col.3, lines 37-67)

Re claim 10. Frank further discloses the method wherein said step of determining

an amount to invest from said taxable and tax deferred accounts further includes:

creating a plurality of GA chromosome structures, each GA chromosome

structure including a value for each of said plurality of investments, each value

being an indication of an amount from said tax-free accounts to invest in said

corresponding investment; setting said values in said plurality of GA

chromosome structures to initial settings; evaluating fitness of said plurality of GA

chromosome structures; selecting at least one of said GA chromosome

structures with an optimal fitness; and using said values from said selected GA

chromosome structure as amounts from said tax-free accounts to invest in said

corresponding investment for said substantially maximal accumulation (see col.8,

lines 1-60).

Re claim 11. Frank further discloses the method further including the step of:

calculating an improvement value of said substantially maximal after-tax

accumulation based on said determined investment amounts from said taxable

and tax-free accounts, as compared to an after-tax accumulation based on said

initial settings (see fig.4, element 52).

Re claim 12. Frank further discloses a computer system for determining an optimal investment strategy for an entity with assets in taxable and tax-free accounts, comprising: means for obtaining tax information, account information, account amounts, and time horizon information from said entity; a GA chromosome structure, for indicating an amount to invest in said taxable and tax-free accounts; means for obtaining initial amounts to invest in said taxable and tax-free accounts; means for calculating an after-tax accumulation based on indications in said GA component structure; means for modifying said GA chromosome structure to improve said calculated after-tax accumulation; and means for displaying said resulting after-tax accumulation (see summary of invention).

5.    Claims 1-12 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter.  The inventive entities of application **09346602**, a continuation in part of the present application **09825426,** are Glenn Frank, Jay Whittaker, and Robert Keller. However, the inventive entities of the present application – 09825426 are Glenn Frank and Jay Whittaker. The missing inventive entity from the present application i.e., Robert Keller could have been the inventor of the present application. Thus, to overcome this rejection, appropriate clarification is needed from the missing inventive entity.
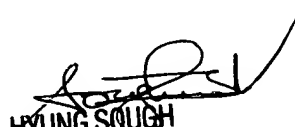
### *Response to Arguments*

6.      Applicant's arguments with respect to claims 1-12 have been considered but are

moot in view of the new ground(s) of rejection.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to OJO O. OYEBISI whose telephone number is (571)

272-8298.  The examiner can normally be reached on 8:30A.M-5:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, HYUNG S. SOUGH can be reached on (571)272-6799.  The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600